Chapter 9

Assessment & Intervention: The Environment(s) of a Child with Lead Poisoning

Contents

Summary Recommendations for Assessment & Intervention of the Environments of Children with Lead Poisoning

1. The cause of lead poisoning in children is deteriorated lead-based paint--to treat the child, the cause must be addressed.
2. Wisconsin Statute 254.166(1) states that "If the department is notified that an occupant of a dwelling or premises who is a child under 6 years of age has an elevated blood lead level, the department ***shall*** conduct a lead investigation of the dwelling or premises . . ."
3. A local health department contracting with the Department to provide childhood lead poisoning prevention services is required to provide an elevated blood lead investigation for all children with one venous blood lead level (BLL) of $\geq$20 μg/dL or 2 venous blood lead levels $\geq$15 μg/dL drawn at least 90 days apart, and complete and submit a Lead Hazard Property Investigation Report (DPH 4771C).
4. All children with a BLL $\geq$10 μg/dL will benefit from environmental interventions that will result in permanent and/or long-lasting lead hazard reduction actions that will prevent continued and future exposure to other children.
5. An elevated blood lead investigation must be performed by a certified risk assessor or lead hazard investigator.
6. A written summary of the findings of the investigation must be submitted to the property owner and tenant.
7. If lead hazards are found, the summary is to include specific actions that must be taken to decrease/eliminate the lead hazards and a due date by which time the work must be finished.
8. It is in the best interest of Wisconsin children if the actions to decrease lead hazards are permanent or long lasting, and accomplished in as short a time as possible.
9. If the child's BLL meets the statutory definition of an EBL, the property owner will be required to obtain a minimum of a 1-year lead-safe certificate. The certificate must be obtained within one year of the date that the property owner is notified that a child <6 years with an EBL is/was residing at their property at the time of diagnosis. The HD can facilitate this by: 1) notifying the property owner in writing that an EBL child is residing in their property, and 2) writing lead hazard reduction orders that, at a minimum, meet the standards for a 1-year lead-safe certificate.
10. Once the lead hazard reduction work is completed, a clearance investigation and dust wipe samples must be collected. If clearance standards are met, complete and submit Lead Hazard Property Investigation Closure Report (DPH 4771D).
11. If clearance standards are not met, inform the property owner, identify further actions that need to be taken, and a deadline for completion.
12. If the property owner shows undue procrastination in completing orders, the case should be referred to the local legal counsel or district attorney.

Summary Steps of an Elevated Blood Lead Investigation	
Interview	From the tenant & property owner, collect background information on the age, physical characteristics, use patterns of the dwelling, and identification of non-paint hazards.
Look at the property	Do a visual assessment to determine the extent & causes of paint deterioration, and to identify other potential non-paint hazards.
Collect environmental samples	As appropriate, following the procedures learned in the lead risk assessor training
Identify non-paint hazards	Determine if non-paint lead hazards may be causing exposure.
Prepare a written summary report **Deliver to the property owner and tenant**	Provide a written summary report of the lead hazard investigation to the property owner (& tenant, if applicable) with the results of the investigation, including work orders for lead hazard reduction
Order Lead Hazard Remediation	Orders specify what work is to be done, who must perform the work, and the due date for completion.
Monitor the lead hazard reduction work that is ordered	If work ordered by the health department to reduce lead hazards is considered abatement, it must be performed by a state certified lead contractor. The ordered work is to be monitored to prevent further lead hazards from being created.
Clear the property through visual assessment and clearance dust wipe samples **Determine that non-paint hazards have been removed**	A follow-up visual assessment is done to determine that lead hazards have been remediated. In the case of lead-based paint hazards, clearance dust wipe samples must be obtained to verify safe completion of the work ordered.
Initiate Enforcement Actions	If the property owner does not comply with lead hazard reduction orders, the property should be referred to the local legal authority for enforcement

Introduction

The most effective treatment of lead poisoning is to remove the source(s) of exposure by eliminating or decreasing the lead hazards in the child's environment. Therefore, unlike other medical diagnoses, the primary treatment for lead poisoning falls outside the medical domain and into that of public health. State statute (Wis. Stats. 254.11(5m)) requires that a child with an elevated blood lead level (one venous blood lead test $\geq$20μg/dL or 2 venous blood lead tests $\geq$15 μg/dL that are drawn at least 90 days apart) have an elevated blood lead investigation of their home.

Lead investigation activities means "any activity that determines whether lead–based paint or lead hazards are present" (HFS 163.03(76)). WCLPPP supports the lead risk assessment as the intervention of choice for an EBL investigation. The risk assessment focuses on both paint and non-paint lead hazards as sources of lead exposure for a child with lead poisoning. This is in contrast to a lead inspection which identifies the presence of lead-based paint, but does not determine whether the lead-based paint is a hazard or not. To perform lead investigation activities, an individual must be certified by the state as a risk assessor or lead hazard investigator.

Lead hazard reduction activity is any action intended to permanently or temporarily reduce or eliminate human exposure to lead-based paint hazards (HFS163.03(71)). Permanent actions are called abatement activities, and must be performed by a certified lead abatement worker or supervisor. Temporary actions are called non-abatement activities.

The owner of the property, whether the child's parent/caregiver or landlord, is the primary source of contact for the risk assessor, and is responsible for fixing identified lead hazards to clearance standards. The risk assessor does not need the cooperation of the tenant or owner to investigate the property, although it is preferable to work alongside the property owner to solve the problems. If it is difficult to determine the property owner, the local tax assessor's office may assist you in identifying and locating him/her.

The property where the child was lead poisoned remains the focus even if the child relocates. Lead hazards found at the original property must still be remediated to prevent exposure and poisoning of other children. The property where the child moves must also become a focus for the risk assessor, to prevent further or repeat poisoning. The new property may only require a visual assessment to determine age, or it may require a lead risk assessment.

General information about environmental interventions for lead poisoned children or in situations where lead is identified as a human health hazard can be found in Wis Stat 254, which can be viewed at www.legis.state.wi.us/statutes/01Stat0254.pdf. Details of certification and work practice standards are defined by Administrative Rule HFS 163, and can be viewed at http://www.legis.state.wi.us/rsb/code. Questions about these issues should be addressed to the Wisconsin Asbestos and Lead Section phone (608) 261-6876; e-mail plicasbestoslead@dhfs.state.wi.us, or fax (608) 266-9711.

When to Do an EBL Investigation

Local public health departments must comply with Wisconsin Statute in providing a lead hazard investigation for all children with a single venous BLL ≥ 20μg/dL or 2 venous BLLs ≥ 15-19μg/dL performed at least 90 days apart. While there are minor word variations, the CDC, Wisconsin Statute and the Wisconsin Medicaid Program agree that environmental interventions for children with BLLs ≥ 15μg/dL are necessary to treat lead poisoning:

- ✓ CDC recommends that an investigation be conducted to identify lead sources in the homes and environments of children with venous BLLs ≥20 μg/dL or 2 venous BLLs of ≥15μg/dL at least 3 months apart.
  "Screening Young Children for Lead Poisoning: Guidance for State and Local Public Health Officials", Centers for Disease Control and Prevention, November, 1997
- ✓ Wisconsin Statute requires that the Department "conduct a lead investigation of the dwelling or premises or ensure that a lead investigation of the dwelling or premises is conducted" for all children less than 6 years of age with an elevated BLL (Wis. Stat. 254. 166(1)). An elevated BLL is defined as one venous BLL ≥ 20μg/dL or 2 venous BLLs ≥ 15μg/dL performed at least 90 days apart (Wis. Stat. 254.11(5m)).
- ✓ The Wisconsin Medicaid Program will reimburse LHDs with certification as HealthCheck providers for an environmental investigation of the child's home and a follow-up visit to determine clearance of the property after work has been done. Eligible children must have "a venous BLL >19μg/dL or 2 consecutive BLLs of 15-19μg/dL done at least 3 months apart."
  (Wisconsin Medicaid Provider Handbook, Part D, Division I, p. ID2-006)

Wisconsin Law (Wis Stat 254.11(9)) concurs with the Federal Centers for Disease Control and Prevention (CDC) definition of lead poisoning as a blood lead level of 10μg/dL or higher. Best practice dictates an environmental investigation for every child found to be lead poisoned. Wisconsin law supports best practice by:

- ✓ Permitting an inspection of the dwelling of any child under 6 years of age who has a BLL ≥10 μg/dL (Wis. Stat. 254.166; Appendix 5A)
- ✓ Permitting local health officers, in cities under general charter, to enter a dwelling to ascertain health conditions regardless of the age or lead level of the occupants (Wis. Stat. 254.59, Appendix 5A)

Many health department policies support best practice, yet it is beyond the reach of some due to available resources, or the numbers of cases of lead poisoned children. It is the goal of WCLPPP to implement best practice with environmental investigations for all children with BLLs ≥10μg/dL throughout the state.

EBL Investigation Activities

Stopping the exposure of a child to lead hazards is the most important form of treatment for the disease. Other interventions, such as nutritional support, treatment

of anemia and chelation supplement the elimination of lead exposure. Assessment of the environment is the first step in identifying the source(s) of lead exposure and activities to control or eliminate the exposure.

Environmental Risk Assessment

The purpose of the risk assessment is not to identify the "presence" of lead-based paint (LBP), but rather to identify those surfaces covered in leaded paint or varnish that are deteriorated, pose a hazard, and/or are accessible to the child. It also includes determining the presence of non-LBP hazards, such as vinyl mini-blinds or occupation of the parent/caregiver.

Several tools are available for testing for the presence of LBP. The first choice is paint chip analysis done by a laboratory certified in the procedure. A second tool is XRF machines. Use of these tools is detailed in risk assessor training, and will not be reviewed here.

The risk assessment has 4 major components: interview, visual assessment, collection of environmental samples, identifying non-paint lead hazards. These are covered in detail in certification training, and will be summarized briefly here.

Interview With the Family and Property Owner

An interview with the family of the lead poisoned child is the first step in identifying sources of lead exposure. This part of the investigation is vital to determine the habits and locations the child frequents, both in and outside of the home. It is also the time when questions about non-lead based paint hazards and exposures can be asked. The interview should be conducted according to the guidelines of the training courses for lead hazard investigators.

If the property is not owner-occupied, it is ideal if the property owner can be present during the interviewing. This allows direct answers about the history and uses of the property. It also allows for providing information about lead poisoning, lead safe maintenance practices, and owner responsibilities.

Visual Assessment

A visual assessment quickly identifies deteriorated lead-based surface coatings, the most widespread and dangerous source of lead in the environments of children. Whether a lead-based surface coating becomes a hazard depends on several things:

- ✓ The condition of the paint or coating;
- ✓ The location, such as friction or impact points;
- ✓ The concentration of lead in the paint or coating; and
- ✓ The accessibility of the paint or coated surface to children.

If lead is present in paint or other surface coatings that are in good condition (not chalking, cracking, chipping, peeling, flaking), it may not be a hazard and should not be disturbed. However, if LBP is present on a friction or impact surface, the chance

that it poses a hazard increases. Figure 9.1 provides definitions for friction and impact surfaces along with specific examples of friction and impact surfaces commonly found in homes

Figure 9.1

Friction and Impact Surfaces*	
Definition	**Examples in the home**
Friction Surfaces: ". . . an interior or exterior surface that is subject to abrasion or friction. . ."	✓ doors that rub against jambs ✓ window sashes and jambs ✓ floors or stairs, especially in high traffic areas, such as entrance areas and hallways ✓ cabinet drawers and their openings ✓ pantry shelf surfaces where food containers or dishes may scrape the shelves
Impact Surfaces*:* ". . . an interior or exterior surface that is subject to damage by repeated sudden force . . "	✓ doors, doorknobs and latches that strike door stops, walls or strikeplates ✓ cabinet doors that strike cabinets or walls ✓ drawers that contain sharp objects (such as knives or tools) ✓ baseboards which may be struck by objects such as vacuum cleaners or riding toys ✓ stair risers that may be struck by the toe/tip of shoes

*HFS 163.03(45) and HFS 163.03(57)

Before visiting a dwelling to evaluate the sources of lead in a child's environment, it may be helpful to review the causes of paint failure. These are summarized in the 1995 HUD Guidelines, which can be viewed by clicking on "reference library" at the HUD website (www.hud.gov/offices/lead). They include moisture, aging, temperature extremes, sunlight, mechanical damage, chemical incompatibility, poor surface preparation, and damage to the substrate. The presence of any of these causes should be noted during the investigation, and correction of causes should be included in lead hazard reduction orders.

Collect Environmental Samples

The condition, location and accessibility of potential lead hazards can be evaluated visually. Determining the concentration of lead requires additional testing. Other surfaces or substances may also need to be tested to determine the presence of lead. Laboratory analysis can be done on samples of paint chips, dust wipes, soil, water, varnish scrapings, home/traditional remedies and cosmetics. X-Ray fluorescence (XRF) of paint and varnish indicates the concentration of lead in the coat of paint being measured. Home test kits can be used to indicate the presence, but not the concentration of lead on many products, including paint, pottery, and mini-blinds. The benefits and drawbacks of different sampling types, as well as how to collect accurate samples, is covered in the training required for certification in a profession that can perform a lead hazard investigation. A sample of the form used to

submit environmental samples to the Wisconsin State Laboratory of Hygiene can be found at the end of this chapter.

Assess for Non-paint Lead Hazards
While paint is the primary cause of lead poisoning in children, non-paint lead hazards must also be assessed. These include parental occupations or hobbies, pottery, traditional medicines or cosmetics, vinyl mini or vertical blinds, candles, and pool chalk. New sources of lead continue to emerge. WCLPPP attempts to notify all local health departments when we become aware of new sources of lead. By subscribing to The National Center for Healthy Housing (www.centerforhealthyhousing.org) (formerly the National Center for Lead Safe Housing) and the Alliance to End Childhood Lead Poisoning (www.aeclp.org) listserves you will automatically receive notifications via e-mail about newly identified lead hazards, as well as current legislation, litigation, and other program activities aimed at eliminating lead hazards.

Written Report to Property Owner & Tenants

A written report summarizing the risk assessment must be provided to the owner and tenant within 10 working days after the assessment or when results of laboratory samples are received. The content of the written report are described by administrative rule (HFS163.14(9)(k)):

- ✓ Date of risk assessment;
- ✓ Address of each building assessed;
- ✓ Date of construction of buildings;
- ✓ Apartment number of units assessed, if applicable;
- ✓ Name, address and telephone number of each current owner of each building;
- ✓ Name, address, telephone number, certification number and signature of each certified individual participating in the risk assessment;
- ✓ Name, address, telephone number, certification number and signature of each laboratory conducting analysis of collected samples;
- ✓ Results of the visual inspection;
- ✓ Description of testing method and sampling procedure used for paint analysis;
- ✓ Specific locations of each painted component tested for the presence of lead;
- ✓ All data collected from on-site testing, including quality control data and, if used, the serial number of any XRF;
- ✓ All results of laboratory analysis on collected paint, soil and dust samples;
- ✓ Any other sampling results;

- ✓ Any background information on the physical characteristics of the residential dwelling or child-occupied facility and occupant use patterns that may cause lead-based paint exposure to a child under 6 years of age;
- ✓ If used, the results of any previous inspections or analyses for the presence of lead-based paint hazards or other assessment of lead-based paint-related hazards;
- ✓ A description of the location, type and severity of identified lead-based paint hazards and any other potential lead hazards; and
- ✓ A description of lead hazard reduction options for each identified lead-based paint hazard and a suggested prioritization for addressing each hazard. If the use of an encapsulant or enclosure is recommended, the report shall recommend a maintenance and monitoring schedule for the encapsulant or enclosure;

The orders must specify who is allowed to do the work, and the date by which the work must be completed.

To facilitate the written summary of the risk assessment, data collected should be recorded in a systematic fashion to keep the investigation organized and thorough. Careful data collection helps to document findings and to communicate clearly with property owners and occupants. Several tools to be used for data collection can be found at the end of this chapter. Any form or tool can be adapted for local use as long as the components required in HFS.163 are documented.

Under Wisconsin Law, reports of investigations conducted in response to a child with lead poisoning shall be made available to, and withstand public scrutiny. The Department of Health and Family Services (DHFS) (and those acting under the authority of the Department) "shall prepare and file written reports of all risk assessments conducted under this section and shall make the contents of these reports available for inspection by the public, except for medical information..." (Wis Stat 254.166).

The report also becomes disclosable under US HUD and EPA real estate disclosure regulations. The federal agencies ask that the report to the owner include the following paragraph.

> *The federal Residential Lead-Based Paint Hazard Reduction Act, 42 U.S.C. 4852d, requires sellers and landlords of most residential housing built before 1978 to disclose all available records and reports concerning lead-based paint and/or lead-based paint hazards, including the test results contained in this notice, to purchasers and tenants at the time of sale or lease or upon lease renewal. This disclosure must occur even if hazard reduction or abatement has been completed. Failure to disclose these test results is a violation of the U.S. Department of Housing and Urban Development and the U.S. Environmental Protection Agency regulations at 24 CFR Part 35 and 40 CFR Part 745 and can result in a fine of up to $11,000 per violation. To find out more information about*

your obligations under federal lead-based paint requirements, call 1-800-424-5323.

A risk assessment of the residence(s) of children with elevated blood lead levels is reported to WCLPPP on the DPH4771C, "Lead Hazard Property Investigation Report" found at the end of this chapter. This information allows program staff to conduct surveillance of causes of childhood lead poisoning and to effectively target resources to assist in education, environmental investigations, and prevention activities.

A sample letter written to a property owner to summarize a lead hazard investigation in the case of a lead poisoned child can also be found at the end of this chapter.

Lead Hazard Reduction Activities

The most important role of the risk assessor is to assure that the lead hazards identified in the lead hazard investigation are safely and effectively made lead safe. The risk assessor writes orders that will accomplish this, and also refers property owners to local agencies that may offer financial assistance to cover the cost of the lead hazard reduction work. The risk assessor also monitors the work and documents that the hazards have been successfully treated.

The risk assessor is provided some discretion in ordering abatement or interim control activities, and the amount of time given to complete the orders. The goal is to decrease the exposure of the lead poisoned child to lead hazards in the shortest time possible, and to prevent future exposure of other children.

Analysis of Wisconsin data of children with diagnostic BLLs between 20-40μg/dL has shown that it takes about 4 years for the BLL to drop to below 10μg/dL. Additional analysis attributed a faster decline in the child's BLL to a half-life in lead hazard reduction on the property was completed within 6 months.

Wisconsin has enacted a law that established a Lead-Free/Lead-Safe Registry, administered by the Division of Occupational Health, Lead and Asbestos Section. All property owners of a residence where a child <6 years of age has been diagnosed with an EBLL must obtain a lead-safe certificate for a minimum of one year duration. While this activity is independent of the health departments environmental interventions for a lead poisoned child, the HD risk assessor can facilitate the lead-safe certificate by:

1. Notifying the property owner in writing as soon as a child residing in his/her property is diagnosed with an EBL. The one year deadline for obtaining the certificate begins with that notification.
2. Writing lead hazard reduction orders that are compatible with the one-year lead-safe certificate standards.

Written Orders for Lead Hazard Reduction

Reduction of lead hazards should be prioritized to most effectively decrease exposure to children. Priority should be given to areas where children play, eat, and sleep. In areas where lead paint or varnish has been documented, priority attention should be given to:

- ✓ floors that have visible paint chips, or is located in an area where active disturbance of the paint or varnish has occurred;
- ✓ windows that have visible paint chips or dust generated by opening and closing the window;
- ✓ exterior play areas with bare soil and visible paint chips or where active disturbance of the paint or varnish has occurred; and
- ✓ toys, beds, and other furniture in the child's usual activity areas;

Considerable discretion is left to LHDs to determine how the lead hazards identified are to be addressed. Lead hazards can be reduced or eliminated temporarily through interim controls, or permanently through abatement. The risk assessor can exercise his/her judgment about which single or combination of hazard reduction measures are best suited for a given situation. No matter what type of work is ordered, a visual assessment of the finished work and clearance dust wipe samples must be collected. Any lead hazard reduction work, whether interim controls or abatement, can create exposure hazards if the person doing the work is not properly trained, if dust created during work is not minimized, or if proper clean-up of lead dust and debris is not done. Depending on the hazards found and the type of work to be done, the occupants may need to be relocated until the hazards are controlled.

Abatement Measures for Lead Hazard Reduction

While permanent measures (abatement) tend to be costly in the short run, they produce long-term safety for children and limited liability protection for the property owner. Abatement means "any measure or set of measures intended to permanently eliminate lead-based paint hazards" (HFS 163.03(1)). The four types of abatement techniques commonly used are encapsulation, enclosure, removal, and replacement. The definition and application of each is fully described in Figure 9.3.

Data indicate that permanent measures are more effective at reducing lead dust levels and protecting children. For a detailed evaluation and comparison of the available data see two 1995 publications: *Does Residential Lead-Based Paint Abatement Work? (* www.centerforhealthyhousing.org*)* and *Review of the Studies Addressing Lead Abatement Effectiveness* (http://www.epa.gov/opptintr/lead).

Non-abatement Measures for Lead Hazard Reduction

Non-abatement activities are "any measures or activities intended to temporarily but not permanently reduce exposure to lead based paint hazards" (HFS 163.03(c)). Cleaning, wet scraping, and repainting can be economical and cost-effective for interior or exterior wall surfaces. For building components subject to friction and impact (Figure 9.2), permanent measures are more effective at long-term reduction

Figure 9.3 Standard Methods of Lead Abatement

Method/ Definition	Description	Application
Encapsulation ". . . the process of making lead-based paint inaccessible by the application of an encapsulant." (HFS163.03(42))	Provides a barrier between LBP and the environment.	A barrier, formed by applying a liquid coating or adhesive bond specifically labeled as an encapsulant, is used to cover lead-based paint. The area to be treated is first tested to determine if the encapsulant will hold to the surface. Not for use on friction or impact surfaces When complete, encapsulation should leave an easy-to-clean surface.
Enclosure ". . . the use of rigid, durable materials . . . that act as a dust-tight barrier between lead-based paint and the environment." (HFS163.03(44))	A barrier is attached to building components with all edges and seams sealed. Examples are sheet rock, wood or wood paneling on walls, exterior siding, vinyl/metal sash tracks for windows, linoleum, or wood over floors.	The enclosed area must be able to support the added weight of the enclosure material. Enclosure material is nailed or screwed into wood rafters or studs; caulk or some type of sealant is applied to the back of the surface to create an airtight barrier to lead dust. When complete, enclosure should leave an easy-to-clean surface.
Removal	The removal of all LBP from building components. Can be done on- or off-site. Removal can be conducted on the entire surface or just at the friction points where LBP rubs together	**On-site removal options:** The following methods **cannot** be used: (HFS 163.14 (3) & (4): ✓ Open flame burning or torching ✓ Machine sanding or grinding, abrasive blasting or sandblasting, or planing <u>unless</u> contained & a HEPA attachment is used. ✓ A heat gun at <u>≥</u> 1100°F ✓ Dry scraping ***<u>except</u>*** around electrical outlets or on spots totaling no more than 2 square feet in any one interior space or 20 square feet on exterior surfaces. When complete, removal should leave an easy-to-clean surface.
Replacement ". . . removing building components that have surfaces coated with lead-based paint and installing new components free of lead-based paint. (HFS163.03(101))	The building component contaminated with lead-based paint is replaced with a new component.	Cost effective for wood trim (baseboards), replacing doors and windows with energy efficient ones. When complete, replacement should leave an easy-to-clean surface.

**Note: limited wet scraping and wet sanding may also be considered interim control methods if the goal is to prepare surfaces for re-painting and to stabilize and make intact surfaces with old lead paint rather than the permanent removal of LBP.*

of lead dust levels. Cleaning alone has some utility as an inexpensive and rapid method to reduce lead dust levels, but lead hazards addressed only by cleaning fail dust tests more often and more quickly than surfaces treated with more ambitious methods.

Some examples of temporary measures that parents and property owners can undertake immediately are listed below. These measures are most effective when the area is well circumscribed, such as window well, porch, floors, etc. They are not a substitute for long term or permanent lead hazard reduction

- ✓ Wash pacifiers and toys that are mouthed frequently during the day;
- ✓ Block access to areas where paint is not intact, e.g. with heavy pieces of furniture;
- ✓ Wet-clean window sills and window wells at least twice a week using soap and water;
- ✓ Wet mop all floors with soap and water at least twice a week and as needed; and
- ✓ Use a vacuum with a hepa filter to clean areas of paint dust and chips.

Interim controls require continuous and frequent monitoring because of the uncertainty of how long they will be effective in controlling lead hazards. They are the least effective in protecting the lead poisoned child or children who may inhabit the property in the future from lead exposure. Whenever possible, LHDs are advised to order interim controls only for immediate control of lead exposure, while specifying abatement measures in the written orders to the owner for sustained lead hazard reduction at the property.

Setting a Completion Date for Orders for Lead Hazard Reduction Activities

Wisconsin Law provides LHDs some discretion in setting time limits for property owners to conduct this work (Figure 9.4). A 5-day deadline can be given to reduce or eliminate imminent hazards. For non-imminent hazards orders may require work to be done within 30 days of the order's issuance. For orders issued, to address non-imminent hazards on the exterior of the dwelling during the cold weather period of October 1 to May 1, orders may require a deadline of no earlier than June 1 immediately following the order's issuance. The 5-day or 30 day orders can be extended if the property owner shows good cause.

Continued delay in the completion of lead hazard reduction work that extends the exposure time to sources of lead is very harmful to the child. Research shows that the younger the child and the longer the exposure, not matter what the BLL is, the more serious the toxicity to the brain and other soft tissues. Maximizing assistance to the property owner in obtaining financial resources and identifying lead certified contractors is an important role for public health staff to play to expedite completion of the lead hazard reduction orders.

Figure 9.4

Deadlines for Ordered Lead Hazard Reduction	
Type of hazard	**Time Limit**
Imminent hazards (Defined in Chap. 254.11(7g))	5 days
Non-imminent hazards	30 days
Non-imminent exterior hazards found October 1 through May 1	After the next June 1

Wis Stat 254.166(2)(d)

Monitor Work Progress

Lead abatement work in the case of a lead poisoned child must be done by a certified lead contractor. However, if the property owner is planning to hire someone to do non-abatement work, it is in their best interest to hire a certified lead contractor. Lists of currently certified lead contractors are available from the Wisconsin Asbestos and Lead Section, (608) 261-6876.

The risk assessor is responsible for monitoring the work in progress, especially if being done by the property owner or a non-certified contractor. This is to insure that no new lead hazards are created as a result of work done in an unsafe manor.

Removal of Lead Contaminated Materials

The Wisconsin Department of Natural Resources, Bureau of Solid and Hazardous Waste Management regulates lead removal and disposal. Their publication, "Paint Removal: Commercial and Residential" (www.dnr.state.wi.us/org/aw/wm/publications/hazard/wa_173.pdf) answers a number of questions about paint removal and disposal and has phone numbers of the regional DNR offices. For further information, contact the nearest regional office, or the Waste Management Program at (608) 266-2111.

Clear the Property

When the due date for completion of lead hazard reduction orders arrives, the certified lead hazard investigator, inspector, or risk assessor conducts a follow-up visit to the site to assure that the work was done safely, that no new lead hazards were created, and that the property meets clearance standards. Details of the clearance protocol can be found in HFS 163.14(5).

The first step in clearing the property is to do a visual inspection. The site is looked at to determine and document that lead hazards were addressed as ordered and that no further hazards were created by the work.

The next step is to collect dust wipe samples from areas where lead hazard reduction work was ordered. Generally, the standard is to collect 4 floor and 4 window samples from 4 different rooms. These samples must meet clearance dust standards for the component before the property can be considered closed. Current standards in

Wisconsin statute are provided in Figure 9.5. If the results do not meet the standards, additional work must be ordered, monitored and re-investigated until clearance standards are met.

Figure 9.5

Wisconsin Standards for Single Surface Dust Sampling	
Surface	**Leaded Dust Loading (μg/dL)**
Uncarpeted floor	40
Interior window sills/stools	250
Window wells/troughs	400*

Chapter HFS 163.42(2)2, Wis. Adm.Code, March 1, 2002
*Wisconsin's current window well/trough standard is 800μg/dL; however, regulatory change is in process to lower it to the EPA standard of 400μg/dL.

A written clearance report is provided to the property owner and tenant within 10 working days or when all results of samples sent for laboratory analysis are available. Contents of the written clearance reports for abatement and non-abatement activities are detailed in HFS 163.14(9) and (10).

At the time the property is cleared, complete and submit DHFS 4771D to inform WCLPPP of the status of the property.

Enforcement Of Lead Hazard Reduction

The property owner is responsible for reducing identified lead hazards as ordered by the LHD. The property owner's responsibility to correct identified lead hazards remains even if the property is renter occupied, and/or the lead poisoned child living there at the time of diagnosis is no longer in occupancy.

If the property owner does not comply, LHDs may report the violation of the law to the district attorney of the county in which the property is located for enforcement of the statute. Violators of the law are subject to civil and criminal penalties and fines.

Municipalities, under Wis. Stat. 254.59, may choose to pay for the correction of human health hazards (including lead) and then seek repayment for these costs from the property owner through local property taxes.

Local Ordinances

In some instances it can be time consuming to assure that lead hazards are reduced and that orders are completed in a timely manner. Local ordinances can help LHD's to expedite the process. Local ordinances facilitate a more rapid resolution of cases involving property owners who have not corrected lead hazards within appropriate time limits.

Local ordinances tend to be more efficient than the state system in addressing non-compliant property owners. Relying on state statutes as a remedy involves 3 levels

of government: the local health department, county district attorney, and state law. Some communities with local ordinances report that such cases can move more quickly through the municipal court system, where the parties are familiar with the local childhood lead poisoning issues.

Communities where public awareness about lead poisoning is great enough to support passage of an ordinance also tend to be better educated about lead and the threat it poses to children's health. These communities may respond more promptly to lead poisoning, either by correcting the hazards or bringing about enforcement.

Detailed and Current Information on Lead Hazard Reduction

For a full discussion of how to conduct interim controls and lead abatement, the following publications are excellent resources:

- *1995 HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*, especially Chapters 11-16. This is available for $45 from HUD by calling 1-800-245-2691 or under Reference Library at www.hud.gov/offices/lead
- Lead Based Paint Operations and Maintenance Work Practices Manual for Homes and Buildings, National Institute of Building Sciences, May 1997 (www.nibs.org/pubslead)

For information presented in a simply written and well illustrated format that emphasizes interim controls, and low cost, practical abatement measures, two resources are available:

- *Maintaining A Lead Safe Home* by Dennis Livingston, $19 from Community Resources at 28 E. Ostend St., Baltimore, MD 21230.
- *Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work,* U.S. Department of Housing and Urban Development, Office of Lead Hazard Control, June 1999. Copies are available from the National Lead Information Center at 1-800-424-5323 or download a copy from www.hud.gov/offices/lead (reference library)

For the most current information on federal law and regulations regarding lead hazard reduction, check the following internet sites:

- HUD at www.hud.gov/offices/lead
- EPA's National Lead Information Center at www.epa.gov/oppintr/lead
- National Center for Healthy Housing at www.centerforhealthyhousing.org
- Alliance to End Childhood Lead Poisoning at www.aeclp.org

For current information on Wisconsin Statute relating to childhood lead poisoning and lead hazard reduction activity, go to www.legis.state.wi.us/statutes.

Resources and contact information for frequently used lead hazard reduction products can be found in Chapter 14, Resources.

Certification and Training of Lead Hazard Reduction Workers

Wisconsin Law requires that anyone who conducts an elevated blood lead investigation must be a certified lead hazard investigator or risk assessor (HFS 163.14(2)). The Division of Public Health (DPH) is committed to facilitating training for LHD staff by providing low-cost training and re-certification.

Lead abatement always requires certified workers. Certified workers are also required when the work is:

- ✓ Ordered by the LHD to be completed by certified persons
- ✓ In a property with a child who is lead poisoned
- ✓ Funded by a grant that requires the work to be completed by certified persons

The Wisconsin Asbestos and Lead Section is the source for information about training, certification, and work practice requirements for lead hazard reduction. Go to their Website (http://www.dhfs.state.wi.us/dph_boh/Asbestos_Lead) to find answers to questions about::

- ✓ certification for various lead disciplines;
- ✓ when certification is required for persons doing lead hazard reduction work;
- ✓ the due date for the one-day refresher course in your discipline;
- ✓ persons certified in Wisconsin
- ✓ training opportunities and accredited training providers; and
- ✓ lead-safe and lead-free property registry program

The Website also contains numerous links to other state and local programs with information about lead hazard reduction. The program can be reached by calling (608) 261-6876 or e-mail to “plicasbestoslead@dhfs.state.wi.us”

Funding for Lead Hazard Reduction

Funding for lead hazard reduction activities remains the primary responsibility of the property owner. This is a major challenge in bringing about the elimination of the sources of childhood lead poisoning.

Federal grants that are often awarded to local government or non-profit agencies may be found by checking the internet sources for HUD and EPA. When funding opportunities are known to WCLPPP, the program attempts to notify local health departments by e-mail with information on how to access the application materials.

In addition, HDs are encouraged to communicate and collaborate with local funding sources (such as banks, savings and loans, credit unions) and housing agencies (Weatherization, Community Development Block Grant Fund Agencies) to assist with building the capacity for lead-safe renovation work, financing, and the improvement of quality, affordable, lead-safe housing throughout their community.

References

Centers for Disease Control and Prevention, *Preventing Lead Poisoning in Young Children, A Statement by the Centers for Disease Control*, October 1991.

Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work, US Department of Housing and Urban Development, The US Environmental Protection Agency, and the Center for Disease Control and Prevention, March, 2001 (it can be downloaded at www.hud.gov/offices/lead or call 1-800-424-5323.

Livingston, D., *Maintaining a Lead Safe Home*, Baltimore, MD, Community Resources, 1997.

The National Center for Lead Safe Housing, *Does Residential Lead-Based Paint Abatement Work? A Review of the Scientific Evidence*, Columbia MD, 1995.

The National Center for Lead Safe Housing, *Evaluation of the HUD Lead-Based Paint Hazard Control Grant Program, Fourth Interim Report*, Columbia MD, 1997.

Park, S. and Hicks, D., U.S. Department of the Interior, *Preservation Briefs, Appropriate Methods for Reducing Lead-Paint Hazards in Historic Housing*, U.S. Government Printing Office, 1995.

The Residential Lead-Based Paint Hazard Reduction Act of 1992 (Title X of the Housing and Community Development Act of 1992). Public Law 102-550, Section 1017.

U.S. Environmental Protection Agency, *Model Accreditation Program for the Lead Inspector and Risk Assessor.*

U. S. Environmental Protection Agency. *Review of Studies Addressing Lead Abatement Effectiveness*, 1995.

U. S. Department of Housing and Urban Development. *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing*, Washington, D.C., 1995.

Wisconsin Statute Chapter 254 and Wisconsin Administrative Rules HFS 163

Revised 7/6/2003

Sample Letter to Property Owner: Lead Hazard Investigation Results

OWNER NAME
OWNER ADDRESS

RE: Lead Risk Assessment Results for PROPERTY ADDRESS, WI

Dear Mr./Mrs. NAME:

On Wednesday, November 15, 2000, Mark Chamberlain and I conducted an environmental investigation for lead hazards at your property, PROPERTY ADDRESS, WI, on behalf of the County Health Department.

The investigation was conducted using a SciTech Map 4 X-ray Fluorescence Analyzer to determine the presence of lead-based paint (LBP) on the interior and exterior of the building. This investigation also included a visual assessment to determine the condition of painted surfaces. We collected dust wipe samples from the child's bedroom window stool, front entryway floor and front porch floor. We also collected a composite soil sample from several of the bare soil areas around the property and a varnish scraping from the 2nd floor bathroom/storage floor.

As a result of the investigation the following interior and exterior lead hazards were found and need to be corrected. Your lead cleanup and hazard reduction efforts should focus on the following areas:

1. *All of the deteriorated paint on the exterior, including the basement windows, all window and door casings/trim, exterior painted porch components, painted soffit and facia, areas where the asphalt siding has fallen off, and back door.*

2. *All of the bare soil areas surrounding the property.*

3. *The basement door, loose door in storage area of basement, 1st floor bathroom door, back entry door, living room door, front bedroom door and closet door.*

4. *Vinyl mini blinds that are not labeled "lead-free".*

5. *All interior painted surfaces on doors, door casing and jamb, window surfaces, window casing, baseboards, stairs and walls that have chipping or peeling paint.*

6. *All of the painted surfaces on the interior and exterior of the front porch.*

I have included tables describing the investigation. Table I includes the visual and XRF investigation results and the specifications of the lead hazard reduction work that has been ordered by the County Health Department. Table II gives the results of the paint chip and dust wipe samples. <u>All of the underlined Ordered Actions in Table I and II are specified for a Certified Lead Abatement Contractor.</u> Also, if you are not able to do the temporary lead hazard reduction measures (**in bold**), you will need to hire a Certified Lead Abatement Contractor. To obtain a list of certified contractors in your area, or to become a Certified Lead Abatement Contractor, call (608) 261-6876.

Because lead hazards exist at the property and a child has been lead poisoned, under s.254.166(2)(d) Wisconsin Statutes, you have 30 days to comply with the recommendations. The compliance date is **Friday, February 9, 2001** for clean up on the interior surfaces and **Friday, June 1, 2001** for the exterior work. Failure to comply will result in the referral of this report to the County District Attorney's Office for enforcement. Penalties could be assessed by the County District Attorney's Office since the hazards at

the property have contributed to a child becoming lead poisoned. It is my desire, and I hope yours, to avoid that step. You will need to document the exact dates that you complete each of the required lead hazard reduction recommendations, as outlined in this report, in order to verify that you met the requirements of the statute. Be sure to contact me when the work is complete. **If you have any problems meeting the deadlines for the lead hazard reductions, please contact me at (608) 261-6375 for an extension.** Use the book I enclosed called "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work," for reference when you begin the lead hazard reduction work. ***All of this work should be completed while the children are out of the home.***

I encourage you to borrow the Health Department's High Efficiency Particulate Air (HEPA) Vacuum to do the necessary work. Call the County Health Department to find out where you can pick one up, PHONE NUMBER.

> The federal Residential Lead-Based Paint Hazard Reduction Act, 42 U.S.C. 4852d, requires sellers and landlords of most residential housing built before 1978 to disclose all available records and reports concerning lead-based paint and/or lead-based paint hazards, including the test results contained in this notice, to purchasers and tenants at the time of sale or lease or upon lease renewal. This disclosure must occur even if hazard reduction or abatement has been completed. Failure to disclose these test results is a violation of the U.S. Department of Housing and Urban Development and the U.S. Environmental Protection Agency regulations at 24 CFR Part 35 and 40 CFR Part 745 and can result in a fine of up to $11,000 per violation. To find out more information about your obligations under federal lead-based paint requirements, call 1-800-424-5323.

According to the COUNTY NURSE, you stated that in the future you will refuse to rent to families with young children based on the results of this report. It is unlawful to discriminate against anyone. According to the Fair Housing Act, 1989, "In the sale or rental of housing, no one may take any of the following actions based on race, color, national origin, religion, sex, familial status (families in which one or more children are under 18 and live with a parent or guardian), disability: refuse to rent or sell housing, make housing available, deny a dwelling, set different terms/ conditions or privileges for rental of a dwelling...

If you have questions regarding the lead risk assessment please call me at (608) 261-6375.

Sincerely,
FOR THE BUREAU OF ENVIRONMENTAL HEALTH

Amy Rossow
Environmental Health Specialist,
Wisconsin Childhood Lead Poisoning Prevention Program
DHFS Lead Risk Assessor Certification #: XXXXXXXXX

Enc: Investigation report including sample results
HEPA-Vacuum/Phosphate Wash Clean-up Procedure
Lead Hazard Clean-up Options
Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work
Wisconsin Statute 254
Certified Lead Contractors List
EPA/HUD Notification Pamphlet
Fair Housing, It's Your Right

cc: TENANT
County Health Department

TABLE 1 Results of Investigation for lead hazards: November 15, 2000; PROPERTY ADDRESS **SAMPLE**

***XRF Readings** *(If XRF results are >0.7 mg/cm^2 then lead is present.)*

Room/Surface	Condition	Shown in mg/cm^2	Visual Notes	Ordered Action(s)
EXTERIOR – stairs to front porch	Fair/good	N/A	New components	
EXTERIOR – front porch, painted walls	**poor**	**23.47**	**Alligatoring white paint**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Wet scrape and remove loose paint on all exterior painted components in deteriorated condition. HEPA vacuum all visible dust and chips, wash and clean water rinse to prepare for painting. Prime and repaint. This is a temporary measure. See pages 15, 22 - 24, and 27 in "Lead Paint Safety". If it cannot be maintained or you want a certified contractor to do a permanent option, see Lead Hazard Options attachment. It was mentioned that the property owner has plans to re-side the property in the Spring due to the deterioration of the asphalt siding.**
EXTERIOR – front porch, asphalt siding below windows	**fair**	**N/A**		**It was mentioned that the property owner has plans to re-side the property in the Spring due to the deterioration of the asphalt siding.**
EXTERIOR – front porch, windows	**poor**	**N/A**	**Flaking**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Wet scrape and remove loose paint on all exterior painted components in similar condition. HEPA vacuum all visible dust and chips, wash and clean water rinse to prepare for painting. Prime and repaint. This is a temporary measure. It was mentioned that the property owner has plans to reside the property in the Spring due to the deterioration of the asphalt siding. At this time it would be a good idea to wrap the window trough, casing, soffits and facia in aluminum to prevent further deterioration. Storm windows should also be fitted to help preserve the window components that are painted. Make sure that the storm windows have drain holes so water can run off the trough to the outside. See pages 15, 22 - 24, 27, 35 & 36 in "Lead Paint Safety" If it cannot be maintained or you want a certified contractor to do a permanent option, see Lead Hazard Options attachment.**
EXTERIOR – front porch, 2 tomato plants planted in front	**fair**	**N/A**	**Visible paint chips in bare soil on A and B side of building**	**DO NOT EAT THE TOMATOES FROM THESE PLANTS. These plants have been planted in an area where there is a high concentration of lead in the soil. Remove and dispose of the plants. At a minimum plant grass seed/flowers/bushes or put wood chips/gravel in the bare soil areas surrounding the property. Put wood chips or gravel in areas where you are not planting or areas that have high foot traffic.**
EXTERIOR – soffits and facia	**poor**	**N/A**	**flaking and chipping**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Wet scrape and remove loose paint on all exterior painted components in similar condition. HEPA vacuum all visible dust and chips, wash and clean water rinse to prepare for painting. Prime and repaint. This is a temporary measure. It was mentioned that the property owner has plans to reside the property in the Spring due to the deterioration of the asphalt siding. At this time it would be a good idea to wrap the window trough, casing, soffits and facia in aluminum to prevent further deterioration. . See pages 15, 22 - 24, and 27 of the "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" If it cannot be maintained or you want a certified contractor to do a permanent option, see Lead Hazard Options attachment.**

TABLE 1 (continued) Results of Investigation for lead hazards: November 15, 2000; PROPERTY ADDRESS **SAMPLE**

***XRF Readings** *(If XRF results are >0.7 mg/cm^2 then lead is present.)*

Room/Surface	Condition	Shown in mg/cm^2	Visual Notes	Ordered Action(s)
EXTERIOR– clap board siding under asphalt siding (that has fallen off on B and C sides)	**poor**	**5.2**	**Chipping/worn off**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Wet scrape and remove loose paint on all exterior painted components in similar condition. HEPA vacuum all visible dust and chips, wash and clean water rinse to prepare for painting. Prime and repaint. This is a temporary measure. See pages 15, 22 - 24, and 27 in "Lead Paint Safety". If it cannot be maintained or you want a certified contractor to do a permanent option, see Lead Hazard Options attachment. It was mentioned that the property owner has plans to reside the property in the Spring due to the deterioration of the asphalt siding.**
EXTERIOR – all windows, including basement windows	**poor**	**N/A**	**Peeling and chipping**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Wet scrape and remove loose paint on all exterior painted components in similar condition. HEPA vacuum all visible dust and chips, wash and clean water rinse to prepare for painting. Prime and repaint. This is a temporary measure. It was mentioned that the property owner has plans to reside the property in the Spring due to the deterioration of the asphalt siding. At this time it would be a good idea to wrap the window trough, casing, soffits and facia in aluminum to prevent further deterioration. Storm windows should also be fitted to help preserve the window components that are painted. Make sure that the storm windows have drain holes so water can run off the trough to the outside. See pages 15, 22 - 24, 27, 35 & 36 in "Lead Paint Safety". If it cannot be maintained or you want a certified contractor to do a permanent option, see Lead Hazard Options attachment.**
EXTERIOR – gutter system on B side	**poor**	**N/A**	**Water could be causing siding failure**	**All of the gutters and downspouts should be functional to maintain the roof and siding on the exterior. See page 7 of the "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work".**
EXTERIOR – back porch steps	**poor**	**N/A**	**Falling apart, not safe**	**These steps appeared to be newer components that are in disrepair. Replace these steps and build them according to your local city/county building codes, including a handrail.**
EXTERIOR – back porch, door and door casing	**poor**	**N/A**	**Alligatoring**	***A certified contractor must lay down plastic, remove, wrap and dispose of this door and door jamb.*** **A new door should replace this door.** **To treat the door casing set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Wet scrape and remove loose paint on all exterior painted components in similar condition. HEPA vacuum all visible dust and chips, wash and clean water rinse to prepare for painting. Prime and repaint. This is a temporary measure. See pages 15, 22 - 24, and 27 in "Lead Paint Safety". It was mentioned that the property owner has plans to reside the property in the Spring due to the deterioration of the asphalt siding. At this time it would be a good idea to wrap the door casing in aluminum to prevent further deterioration.**
EXTERIOR – roof over kitchen	**poor**	**N/A**	**Sagging in center of kitchen**	**There does not appear to be any water infiltration or damage as a result of this sagging roof. However, you should consider replacing/correcting this problem in the near future to avoid paint damage to the interior ceilings of the kitchen and bath.**

TABLE 1 (continued) Results of Investigation for lead hazards: November 15, 2000; PROPERTY ADDRESS **SAMPLE**

***XRF Readings** *(If XRF results are >0.7 mg/cm^2 then lead is present.)*

Room/Surface	Condition	Shown in mg/cm^2	Visual Notes	Ordered Action(s)
BASEMENT – B wall and D wall	**Fair/poor**	**N/A**	**Mold appears to be growing on walls**	**Clean with a 10% bleach/water solution. You should consider running a dehumidifier in the basement during the Spring, Summer and Fall to control the moisture and eliminate mold growth.**
BASEMENT – loose door in enclosed storage area	**poor**	**N/A**	**alligatoring**	***A certified contractor must lay down plastic, wrap and dispose of this door.***
BASEMENT – landing and stairs leading to back entryway from basement	**poor**	**8.99**	**Battle ship gray paint is worn off on treads and floor**	**Cover portions of stairs and floor that are worn with a durable material such as rubber stair treads. Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Wet scrape, HEPA vacuum, wash and clean water rinse to prepare the stringers for painting. See pages 41& 42 in "Lead Paint Safety". If it cannot be maintained or you want a certified contractor to do a permanent option, see Lead Hazard Options attachment.**
BACK ENTRY – walls **A wall siding** **B wall siding** **C wall siding**	**fair**	 **13.6** **11.9** **9.88**	 **4 in. clap board** **3 in. clap board** **tongue-n-grove**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Wet scrape all loose paint. Feather with a sponge-sanding block saturated with deglossing agent. Wash with household cleaner, clear water rinse and HEPA vacuum all visible chips and dust. Spot prime and top coat with a paint.**
BACK ENTRY – C wall Window	**Poor**	**N/A**	**Chipping**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Wet scrape and remove loose paint on all interior painted components in similar condition. HEPA vacuum all visible dust and chips, wash and clean water rinse to prepare for painting. Prime and repaint. This is a temporary measure. See pages 13 & 14, 29 - 36 in "Lead Paint Safety". If it cannot be maintained or you want a certified contractor to do a permanent option, see Lead Hazard Options attachment.**
BACK ENTRY – C wall **Interior door, casing and jamb** **Exterior of door**	**Fair** **poor**	**12.0**	**Covered with particle board some areas chipping** **alligatoring**	***A certified contractor must lay down plastic, remove, wrap and dispose of this door and door jamb.*** **A new door should replace this door.** **To treat the door casing/trim, set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Wet scrape all loose paint off of casing. Feather with a sponge-sanding block saturated with deglossing agent. Wash with household cleaner, clear water rinse and HEPA vacuum all visible chips and dust. Spot prime and top coat with a high quality paint.**
BACK ENTRY – banister, 4x4 post, and hand rail	**poor**	**1.85**	**Chipping** **1 new component**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Mist defective paint area with water. Lightly scrape all loose paint. Featheredges with a sponge-sanding block saturated with deglossing agent. Rinse and HEPA vacuum all visible chips. Allow surface to dry, spot prime and topcoat with a premium paint.**

TABLE 1 (continued) Results of Investigation for lead hazards: November 15, 2000; PROPERTY ADDRESS **SAMPLE**

***XRF Readings** *(If XRF results are >0.7 mg/cm^2 then lead is present.)*

Room/Surface	Condition	Shown in mg/cm^2	Visual Notes	Ordered Action(s)
KITCHEN – door, casing and jamb	**Fair Fair Fair/poor**	**12.2 18.8 N/A**	**Chipping, worn strike plate, hinge and stop damaged, hinge rubs**	***A certified contractor must lay down plastic, remove and wrap the damaged door stop and dispose of the stop.*** **Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Mist casing and jamb with water. Lightly scrape all loose paint. Featheredges with a sponge-sanding block saturated with a deglossing agent. Rinse and HEPA vacuum all visible chips. Allow surface to dry, spot prime and topcoat with a premium paint.**
KITCHEN – walls A wall C wall upper and lower wainscoting **D wall**	Good Good **Fair/good**	 0.57 16.9 L **N/A**	Paint intact Paint intact Paint intact **D wall minor chipping above outlet**	Maintain **Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Tape over the outlet so as not to get it wet. For your safety you may consider shutting the electricity off in the kitchen while you complete this work. Lightly mist wall with water. Lightly scrape all loose paint. Featheredges with a sponge-sanding block saturated with a deglossing agent. Wipe off residue and HEPA vacuum all visible chips. Allow surface to dry, spot prime and topcoat with a premium paint.**
KITCHEN – ceiling and floor	good fair	N/A .92	Floor is marked up/slightly damaged	Maintain
KITCHEN – windows on B and D walls B window stool and casing **D window stool and casing**	good good **fair**	N/A N/A **15.0**	Vinyl insert windows paint intact **Dirty and chipping**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Lightly wet scrape and remove loose paint on all of the window stools in similar condition. Featheredges with a sponge-sanding block saturated with a deglossing agent. Rinse and HEPA vacuum all visible chips to prepare for painting. Prime and repaint. This is a temporary measure. See pages 13, 14, & 24 in "Lead Paint Safety". If it cannot be maintained or you want a certified contractor to do a permanent option, see Lead Hazard Options attachment.**
KITCHEN – baseboards	good	N/A	Paint intact	Maintain
KITCHEN – upper cupboards on C wall	good	.85	Paint intact	Maintain
KITCHEN – lower cupboards/ pantry on B wall Pantry door Shelving in pantry Inside pantry wall	good good good good	N/A 16.3 6.11 13.95	Paint intact Functional/not rubbing Lined with shelving paper Paint intact	Maintain
KITCHEN – chimney on interior	**fair**	**N/A**	**Paint is water stained, new sealant applied on exterior of roof around neck where original leak was.**	**You may consider cleaning the wall and ceiling areas that are stained and then priming and painting them.**

TABLE 1 (continued) Results of Investigation for lead hazards: November 15, 2000; PROPERTY ADDRESS **SAMPLE**

***XRF Readings** *(If XRF results are >0.7 mg/cm^2 then lead is present.)*

Room/Surface	Condition	Shown in mg/cm^2	Visual Notes	Ordered Action(s)
BATHROOM – door casing on B wall of kitchen **Door and jamb on D wall of bathroom**	**poor** **poor**	**16.83** **17.9**	**Chipping** **chipping**	***A certified contractor must lay down plastic, remove, wrap and dispose of this door and door jamb.*** **A new door should replace this door.** **To treat the door casing/trim set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Wet scrape all loose paint off of casing. Feather with a sponge-sanding block saturated with deglossing agent. Wash with household cleaner, clear water rinse and HEPA vacuum all visible chips and dust. Spot prime and top coat with a high quality paint. See pages 13, 14, & 24 in "Lead Paint Safety". If it cannot be maintained or you want a certified contractor to do a permanent option, see Lead Hazard Options attachment.**
BATHROOM – walls and ceiling	good	N/A	paneled	Maintain
BATHROOM – bathtub	good	25.0	Glazing intact	Maintain
BATHROOM – baseboards	**fair**	**18.5**	**chipping**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Lightly wet scrape and remove loose paint on all of the baseboards in similar condition. Featheredges with a sponge-sanding block saturated with a deglossing agent. Rinse and HEPA vacuum all visible chips to prepare for painting. Prime and repaint. This is a temporary measure. See pages 13, 14, 24 & 43 in "Lead Paint Safety". If it cannot be maintained or you want a certified contractor to do a permanent option, see Lead Hazard Options attachment.**
BATHROOM – mini blinds on window on C wall	**fair**	**N/A**		**Remove all blinds throughout the property if they are not labeled "Lead Free" because they may contain lead and can be hazardous.**
BATHROOM – FLOOR	good	N/A	vinyl	Maintain
BATHROOM – Vent stack pipe	**poor**	**24.34**	**Peeling on backside of pipe, water leak sealed up**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Mist defective paint area with water. Lightly scrape all loose paint. Rinse and HEPA vacuum all visible chips. Allow surface to dry, prime and topcoat with premium metal paint. Build a wood box enclosing the entire pipe from the floor to the ceiling.**
DINING ROOM –Window on C wall	good	N/A	Non-operable, paint intact	Maintain

TABLE 1 (continued) Results of Investigation for lead hazards: November 15, 2000; PROPERTY ADDRESS **SAMPLE**

***XRF Readings** *(If XRF results are >0.7 mg/cm^2 then lead is present.)*

Room/Surface	Condition	Shown in mg/cm^2	Visual Notes	Ordered Action(s)
DINING ROOM – window on A wall Stool and casing Mini blinds	good good	N/A N/A	Vinyl insert paint intact	Maintain
DINING ROOM – door jamb on C wall between kitchen and dining room	good	N/A	Paint intact	Maintain
DINING ROOM – baseboards	**fair/good**	**N/A**	**Minor chipping**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Lightly wet scrape and remove loose paint on all of the baseboards in similar condition. Featheredges with a sponge-sanding block saturated with a deglossing agent. Rinse and HEPA vacuum all visible chips to prepare for painting. Prime and repaint. This is a temporary measure. See pages 13, 14, 24 & 43 in "Lead Paint Safety". If it cannot be maintained or you want a certified contractor to do a permanent option, see Lead Hazard Options attachment.**
DINING ROOM – ceiling Floor Walls	good good good	N/A N/A N/A	Panels Varnished paint intact	Maintain ceiling and walls **HEPA vacuum floors. Use the three-bucket method on hard surface floors to keep clean. See pages 41, 47 & 48 of the "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work".** ***NOTE:*** In the future if you decide to sand the floor surfaces throughout the property be aware that you will be disturbing lead and creating a significant lead hazard for the occupants. Please consult with a floor sanding professional who is knowledgeable about containing the dust by using a HEPA vacuum attachment.
DINING ROOM – Door jamb on D wall between dining room and den	good	10.98	paint intact	Maintain
DEN – pipes in corner of C and D walls	good	N/A	paint intact	Maintain
DEN – baseboards	good	8.7		Maintain
DEN – window on D wall **Stool and casing** **Mini blinds**	Good **fair/good** **good**	N/A **.25** **(-)**	Vinyl insert **paint intact, loose paint chips,** **Both blinds and paint chips tested negative with home test kit**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Lightly wet scrape and remove loose paint on all of the window stools in similar condition. Featheredges with a sponge-sanding block saturated with a deglossing agent. Rinse and HEPA vacuum all visible chips to prepare for painting. Prime and repaint. This is a temporary measure. See pages 13, 14, & 24 in "Lead Paint Safety". If it cannot be maintained or you want a certified contractor to do a permanent option, see Lead Hazard Options attachment.**
DEN – door jamb on A wall between front hall and den	**Good/fair**	**6.0**	**Minor chipping**	**Wash with household cleaner, rinse and touch up with paint.** Note: Door on C wall was covered up.
DEN – ceiling Floor walls	Good good good	N/A N/A N/A	panels carpeted paint intact	Maintain

TABLE 1 (continued) Results of Investigation for lead hazards: November 15, 2000; PROPERTY ADDRESS **SAMPLE**

***XRF Readings** *(If XRF results are >0.7 mg/cm^2 then lead is present.)*

Room/Surface	Condition	Shown in mg/cm^2	Visual Notes	Ordered Action(s)
LIVING ROOM – French doors and door jamb on C wall	good	.36	paint intact	Maintain
LIVING ROOM – baseboards	good	N/A	Paint intact	Maintain
LIVING ROOM – ceiling Floor Walls	good good good	N/A N/A .16	Panels Light varnish Paneled paint intact	Maintain ceiling and walls **HEPA vacuum. Use the three-bucket method on hard surface floors to keep clean. See pages 41, 47 & 48 of the "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work".** ***NOTE:*** In the future if you decide to sand the floor surfaces throughout the property be aware that you will be disturbing lead and creating a significant lead hazard for the occupants. Please consult with a floor sanding professional who is knowledgeable about containing the dust by using a HEPA vacuum attachment.
LIVING ROOM – large non- operable window on A wall	**fair**	**N/A**	**Loose paint chips on stool**	**HEPA vacuum all visible horizontal surfaces especially those with visible paint chips like the window stool. Wet wipe surfaces with a lead specific detergent or equivalent and clean rinse. Use the three-bucket method on hard surface floors. See pages 47 & 48 of the "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work".**
LIVING ROOM – door and door jamb on D wall to front hall	**good good**	**6.6 N/A**	**Door doesn't fit in jamb or close, top hinge loose. Paint is intact on all surfaces**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Adjust the door so that it opens and closes without damaging painted surfaces. Tighten loose hinges. See pages 37 – 39 & 47 in "Lead Paint Safety" for a detailed description of adjusting this door and cleaning up after.**
FRONT HALLWAY – closet and Fire wood box	good good	N/A N/A	Paint intact Lined with metal	Maintain
FRONT HALLWAY – baseboards	good	N/A	Paint intact	Maintain
FRONT HALLWAY – floor	good	.36	Brown paint intact, painted over varnish	maintain **HEPA vacuum. Use the three-bucket method on hard surface floors to keep clean. See pages 41, 47 & 48 of the "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work".** ***NOTE:*** In the future if you decide to sand the floor surfaces throughout the property be aware that you will be disturbing lead and creating a significant lead hazard for the occupants. Please consult with a floor sanding professional who is knowledgeable about containing the dust by using a HEPA vacuum attachment.
FRONT HALLWAY – Ceiling Walls	good good	N/A N/A	Panels Paneling	Maintain
STAIRWAY – leading to 2nd fl. Banister and railing	good	.50	paint intact	Maintain

TABLE 1 (continued) Results of Investigation for lead hazards: November 15, 2000; PROPERTY ADDRESS **SAMPLE**

***XRF Readings** *(If XRF results are >0.7 mg/cm^2 then lead is present.)*

Room/Surface	Condition	Shown in mg/cm^2	Visual Notes	Ordered Action(s)
STAIRWAY – leading to 2nd fl. riser and tread	**fair/good**	**3.82**	**Treads and riser have carpet runner covering high traffic area, small paint chips on carpeting**	**HEPA vacuum all visible horizontal surfaces especially those with visible paint chips. Wet wipe surfaces with a lead specific detergent or equivalent and clean rinse. You may consider steam cleaning this set of stairs to pull up any lead dust from the top surface of the carpeting.**
stairs skirt	good	.65	Paint intact	Maintain
STAIRWAY – leading to 2nd fl. all walls	good	N/A	Paint intact	Maintain
HALLWAY – 2nd fl. All walls	good	.45	Paint intact over wallpaper	Maintain
HALLWAY 2ND FL. – floor	good	N/A	Intact varnish, high traffic area	**HEPA vacuum. Use the three-bucket method on hard surface floors to keep clean. See pages 41, 47 & 48 of the "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work".**
ceiling	good	N/A	panels	***NOTE:*** In the future if you decide to sand the floor surfaces throughout the property be aware that you will be disturbing lead and creating a significant lead hazard for the occupants. Please consult with a floor sanding professional who is knowledgeable about containing the dust by using a HEPA vacuum attachment. Maintain ceiling
BATHROOM/STORAGE (3) – 2nd fl. Floor	**poor**	**.40**	**Torn up old linoleum and varnish below** (see varnish scrape sample Table II)	**Seal off this room before you begin pulling up the old linoleum. You should take a sample of this flooring and the mastic/glue to make sure they are not asbestos containing, before you do work. If they contain asbestos, you will need to hire a certified asbestos abatement company to remove and dispose of the flooring.** **HEPA vacuum. Use the three-bucket wash method on hard surface floors to keep clean. See pages 41, 47 & 48 of the "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work".** *NOTE:* **In the future if you decide to sand the floor surfaces throughout the property be aware that you will be disturbing lead and creating a significant lead hazard for the occupants. Please consult with a floor sanding professional who is knowledgeable about containing the dust by using a HEPA vacuum attachment.**

TABLE 1 (continued) Results of Investigation for lead hazards: November 15, 2000; PROPERTY ADDRESS **SAMPLE**

*__XRF Readings__ *(If XRF results are >0.7 mg/cm^2 then lead is present.)*

Room/Surface	Condition	Shown in mg/cm^2	Visual Notes	Ordered Action(s)
BATHROOM/STORAGE (3) – 2nd fl. **Window on C wall** **Stool and casing**	 **Fair** **Fair**	 **N/A** **21.87**	**Vinyl insert, paint chips (+) in the window trough of the vinyl insert.** **Stool is dirty**	***Paint chips from exterior window casing test positive with home test kit.*** **Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). HEPA vacuum all of the loose paint chips out of the window trough. . Wet wipe surfaces with a lead specific detergent or equivalent and clean rinse. Lightly wet scrape and remove loose paint on all of the window stools in similar condition. Featheredges with a sponge-sanding block saturated with a deglossing agent. Rinse and HEPA vacuum all visible chips to prepare for painting. Prime and repaint. This is a temporary measure. See pages 13, 14, & 24 in "Lead Paint Safety". If it cannot be maintained or you want a certified contractor to do a permanent option, see Lead Hazard Options attachment.**
BATHROOM/STORAGE (3) – Ceiling	Good	N/A	panels	Maintain
BATHROOM/STORAGE (3) – Walls Baseboards	Good Good	N/A N/A	Stucco and paneled Paint intact	 Maintain
FRONT BEDROOM (1) – door and jamb	**fair/good**	**N/A**	**Minor chipping**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Mist defective paint area with water. Lightly scrape all loose paint. Featheredges with a sponge-sanding block saturated with deglossing agent. Rinse and HEPA vacuum all visible chips. Allow surface to dry, spot prime and topcoat with premium paint.**
FRONT BEDROOM (1) - baseboards, walls & ceil	Good	N/A	Paint intact	Maintain
FRONT BEDROOM (1) – floor	Good	N/A	Varnish intact	**HEPA vacuum. Use the three-bucket method on hard surface floors to keep clean. See pages 41, 47 & 48 of the "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work".** ***NOTE:*** In the future if you decide to sand the floor surfaces throughout the property be aware that you will be disturbing lead and creating a significant lead hazard for the occupants. Please consult with a floor sanding professional who is knowledgeable about containing the dust by using a HEPA vacuum attachment.
FRONT BEDROOM (1) – windows 1 & 2 on A wall **Stools and casing** Shelving on A wall EXT – window casing	Good **Fair** Good	**N/A** .08	Vinyl inserts, do not stay open **Stools dirty but paint intact, casing intact** Paint intact	**The vinyl insert windows are not safe because they do not operate properly and will not stay up by themselves. Propping the window open presents a danger to occupants, especially young children. Install "hold open" hardware on these windows. See page 34 of the "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work". Lay down plastic, HEPA vacuum all of the loose paint chips out of the window troughs. Lightly scrape all loose paint from the interior casing/trim. Featheredges with a sponge-sanding block saturated with deglossing agent. HEPA vacuum all visible chips. Wet wipe surfaces and clean rinse. Allow surface to dry, spot prime and topcoat with premium paint. This is a temporary measure. See pages 13, 14, & 24 of the "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work". If it cannot be maintained or you want a certified contractor to do a permanent option, see Lead Hazard Options attachment. Remove blinds if they are not labeled "Lead Free" because they may contain lead and could be hazardous.** **See "EXTERIOR all windows, including basement windows" ordered action on page 4 of Table I**

TABLE 1 (continued) Results of Investigation for lead hazards: November 15, 2000; PROPERTY ADDRESS **SAMPLE**

*__XRF Readings__ *(If XRF results are >0.7 mg/cm^2 then lead is present.)*

Room/Surface	Condition	Shown in mg/cm^2	Visual Notes	Ordered Action(s)
FRONT BEDROOM (1) – Closet on B wall,				**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Mist defective paint area with water. Lightly scrape all loose paint. Featheredges with a sponge-sanding block saturated with deglossing agent. Rinse and HEPA vacuum all visible chips. Allow surface to dry, spot prime and topcoat with premium paint.**
door jamb	good	N/A	Paint intact	
A wall in closet	**poor**	**N/A**	**Paint peeling** (see Table II for sample)	
FRONT BEDROOM (1) – closet door and jamb on D wall	**fair/good**	**13.73**	**Paint intact, door doesn't close minor chipping**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Adjust the door so that it opens and closes without damaging painted surfaces. Tighten loose hinges. See pages 37 – 39 & 47 in "Lead Paint Safety" for a detailed description of adjusting this door and cleaning up after.**
MASTER BEDROOM (2) – ceiling	good	N/A	Paint intact	Maintain
MASTER BEDROOM (2) – walls				**Maintain**
A & D walls	good	0.25	Panels paint intact	
B & C walls	good	0.13	Plaster paint intact	
MASTER BEDROOM (2) – door	good	18.6	**No hardware to latch door. Paint intact**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Install hardware to latch door. Mist defective paint on doorjamb with water. Lightly scrape all loose paint. Featheredges with a sponge-sanding block saturated with deglossing agent. Rinse and HEPA vacuum all visible chips. Allow surface to dry, spot prime and topcoat with premium paint.**
Jamb	**fair/good**	**N/A**	**Chipping**	
Casing	good	16.94	Paint intact	
MASTER BEDROOM (2) – baseboards	good	15.36	Paint intact	Maintain
MASTER BEDROOM (2) window on B wall	good		Vinyl insert	**Maintain**
Stool	**good**	**14.76**	**Paint intact but dirty**	**These vinyl insert windows are not safe because they do not operate properly and will not stay up by themselves. Propping the window open presents a danger to occupants, especially young children. Install "hold open" hardware on this window. See page 34 of the "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work". Lay down plastic, HEPA vacuum all of the loose paint chips out of the window troughs. Lightly scrape all loose paint from the interior casing/trim. Featheredges with a sponge-sanding block saturated with deglossing agent. HEPA vacuum all visible chips. Wet wipe surfaces with a lead specific detergent or equivalent and clean rinse. Allow surface to dry, spot prime and topcoat with premium paint. This is a temporary measure. See pages 13, 14, & 24 of the "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work". If it cannot be maintained or you want a certified contractor to do a permanent option, see Lead Hazard Options attachment. Remove blinds if they are not labeled "Lead Free" because they may contain lead and could be hazardous.**
Casing	**fair/good**	**N/A**	**minor chipping**	
Mini blinds	**fair**	**.3**	**home test kit (-)**	
Exterior casing	**poor**	**N/A**	**Peeling**	**See "EXTERIOR all windows, including basement windows" ordered action on page 4 of Table I**

TABLE 1 (continued) Results of Investigation for lead hazards: November 15, 2000; PROPERTY ADDRESS **SAMPLE**

***XRF Readings** *(If XRF results are >0.7 mg/cm^2 then lead is present.)*

Room/Surface	Condition	Shown in mg/cm^2	Visual Notes	Ordered Action(s)
MASTER BEDROOM (2) Window on C wall **Stool** **Casing** **Trough** **Mini blinds** **Exterior**	 good **good** **fair/good** **poor** **fair** **poor**	 **16.23** **N/A** **Vinyl** **N/A** **N/A**	 vinyl insert **paint intact but dirty** **chipping** **loose paint chips** **home test kit (-)** **peeling**	**These vinyl insert windows are not safe because they do not operate properly and will not stay up by themselves. Propping the window open presents a danger to occupants, especially young children. Install "hold open" hardware on this window. See page 34 of the "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work". Lay down plastic, HEPA vacuum all of the loose paint chips out of the window troughs. Lightly scrape all loose paint from the interior casing/trim. Featheredges with a sponge-sanding block saturated with deglossing agent. HEPA vacuum all visible chips. Wet wipe surfaces with a lead specific detergent or equivalent and clean rinse. Allow surface to dry, spot prime and topcoat with premium paint. This is a temporary measure. See pages 13, 14, & 24 of the "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work". If it cannot be maintained or you want a certified contractor to do a permanent option, see Lead Hazard Options attachment. Remove blinds if they are not labeled "Lead Free" because they may contain lead and could be hazardous.** **See "EXTERIOR all windows, including basement windows" ordered action on page 4 of Table I**
MASTER BEDROOM (2) – floor	good	0.49	Light varnish intact	**HEPA vacuum. Use the three-bucket method on hard surface floors to keep clean. See pages 41, 47 & 48 of the "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work".** ***NOTE:*** In the future if you decide to sand the floor surfaces throughout the property be aware that you will be disturbing lead and creating a significant lead hazard for the occupants. Please consult with a floor sanding professional who is knowledgeable about containing the dust by using a HEPA vacuum attachment.
MASTER BEDROOM (2) closet on A wall **Door casing and jamb** Ceiling and walls	 **Fair** good	 **N/A** N/A	 **Chipping** Paint intact	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Adjust the door so that it opens and closes without damaging painted surfaces. Tighten loose hinges. See pages 37 – 39 & 47 in "Lead Paint Safety" for a detailed description of adjusting this door and cleaning up after. Lay down 4-mil plastic and mist defective paint on doorjamb with water. Lightly scrape all loose paint. Featheredges with a sponge-sanding block saturated with deglossing agent. Rinse and HEPA vacuum all visible chips. Allow surface to dry, spot prime and topcoat with premium paint.** Maintain ceiling and walls
FRONT PORCH – walls **A wall wainscoting** **C wall**	 **poor** **poor**	 **15.73** **15.27**	 **alligatoring** **alligatoring**	***A certified contractor must address all of the lead hazard reduction work on this porch due to the significant amount of deteriorated paint with high levels of lead. Options to address the walls include enclosure, encapsulation, removal or demolition of the entire porch structure.***

TABLE 1 (continued) Results of Investigation for lead hazards: November 15, 2000; PROPERTY ADDRESS **SAMPLE**

***XRF Readings** *(If XRF results are >0.7 mg/cm^2 then lead is present.)*

Room/Surface	Condition	Shown in mg/cm^2	Visual Notes	Ordered Action(s)
FRONT PORCH – door on wall A	**fair/ dry rot**	**.19**	**Door is crushing paint at hinges**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Adjust the door so that it opens and closes without damaging painted surfaces. Tighten loose hinges. See pages 37 – 39 & 47 in "Lead Paint Safety" for a detailed description of adjusting this door and cleaning up after.**
two side windows on A wall	**poor**		**Non-operable, paint is deteriorated**	***A certified contractor must address all of the lead hazard reduction work on this porch due to the significant amount of deteriorated paint with high levels of lead. Options to address these windows include enclosure, encapsulation, removal/replacement or demolition of the entire porch structure.***
FRONT PORCH – windows on A wall **Windows 1 & 4** **Windows 2 & 3 hinged**	 **fair** **fair** **fair/poor**	 **13.93** **N/A** **N/A**	 **Chipping** **Non-operable** **Stool and trough deteriorated paint**	***A certified contractor must address all of the lead hazard reduction work on this porch due to the significant amount of deteriorated paint with high levels of lead. Options to address these windows include enclosure, encapsulation, removal/replacement or demolition of the entire porch structure.***
FRONT PORCH – windows on B wall **Windows 1 & 3** **Window 2**	 **poor** **poor**	 **N/A** **N/A**	**Non-operable Sash is rotted Exterior casing and trough peeling**	***A certified contractor must address all of the lead hazard reduction work on this porch due to the significant amount of deteriorated paint with high levels of lead. Options to address these windows include enclosure, encapsulation, removal/replacement or demolition of the entire porch structure.***
FRONT PORCH – large window on C wall, stool **Leaded glass window above picture window**	**poor** **fair**	**35.6** **24.6**	**Non-operable, stool and casing are alligatoring, chipping paint**	***A certified contractor must address all of the lead hazard reduction work on this porch due to the significant amount of deteriorated paint with high levels of lead. Options to address these windows include enclosure, encapsulation, removal/replacement or demolition of the entire porch structure.***
FRONT PORCH – windows on D wall **Windows 1 & 3** **Window 2**	 **poor** **poor**	 **N/A** **N/A**	**Non-operable Sash is rotted Exterior casing and trough peeling**	***A certified contractor must address all of the lead hazard reduction work on this porch due to the significant amount of deteriorated paint with high levels of lead. Options to address these windows include enclosure, encapsulation, removal/replacement or demolition of the entire porch structure.***
FRONT PORCH – door on C wall (entry) **Door casing**	good **poor**	N/A **N/A**	New door and storm **chipping**	**Set up worksite in accordance with "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work" (p.13). Mist defective paint on door casing with water. Lightly scrape all loose paint. Featheredges with a sponge-sanding block saturated with deglossing agent. Rinse and HEPA vacuum all visible chips. Allow surface to dry, spot prime and topcoat with premium paint.**
FRONT PORCH – ceiling	**fair**	**N/A**	**Wainscoting, similar to wall A**	***A certified contractor must address all of the lead hazard reduction work on this porch due to the significant amount of deteriorated paint with high levels of lead. Options to address this ceiling include enclosure, encapsulation, removal/replacement or demolition of the entire porch structure.***

TABLE 1 (continued) Results of Investigation for lead hazards: November 15, 2000; PROPERTY ADDRESS **SAMPLE**

***XRF Readings** *(If XRF results are >0.7 mg/cm^2 then lead is present.)*

Room/Surface	Condition	Shown in mg/cm^2	Visual Notes	Ordered Action(s)
FRONT PORCH – red floor	**Fair/good**	**11.64**	**Newly painted, paint worn slightly**	**This paint will eventually wear away creating a lead hazard on this friction surface. *A certified contractor must address all of the lead hazard reduction work on this porch due to the significant amount of deteriorated paint with high levels of lead. Options to address this floor include enclosure, removal/replacement or demolition of the entire porch structure.***

INTERIOR: deadline for work is *February 9, 2001*.

EXTERIOR SURFACES: can be repaired in the spring of 2001, deadline for exterior work is *June 1, 2001*.

TABLE II Laboratory Results of Samples taken on: November 15, 2000; PROPERTY ADDRESS **SAMPLE**

Lab #	Type of Sample	Area Sampled	Condition	Results	*Action Levels	Ordered Action(s)
859648	**Wipe**	**CHILD'S BEDROOM (1) interior window stool, window 2**	**Paint good/ Dirty**	**16600 µg/ft²**	**250 µg/ft²**	**Do not open window until exterior window work is complete. Correct and then maintain interior dust level by HEPA vacuuming, washing and rinsing on a regular basis.**
859649	Wipe	ENTRYWAY - floor	good	34 µg/ft²	40 µg/ft²	**HEPA vacuum. Use the three-bucket method on hard surface floors to keep clean. See pages 41, 47 & 48 of the "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work".** **NOTE TO TENANT:** Maintain all varnished and painted floors by HEPA vacuuming, washing and rinsing on a regular basis.
859650	**Wipe**	**FRONT PORCH - floor**	**Fair/good**	**45 µg/ft²**	**40 µg/ft²**	This paint will eventually wear away creating a lead hazard on this friction surface. ***A certified contractor must address all of the lead hazard reduction work on this porch due to the significant amount of deteriorated paint with high levels of lead. Options to address this floor include enclosure, removal/replacement or demolition of the entire porch structure.***
859651	**Varnish scrape**	**STORAGE ROOM (3) Floor varnish scrape**	**poor**	**1.1 %**	**.06 %**	**Seal off this room before you begin pulling up the old linoleum. You should take a sample of this flooring and the mastic/glue to make sure they are not asbestos containing, before you do work. If they contain asbestos, you will need to hire a certified asbestos abatement company to remove and dispose of the flooring.** **HEPA vacuum. Use the three-bucket wash method on hard surface floors to keep clean. See pages 41, 47 & 48 of the "Lead Paint Safety: A Field Guide for Painting, Home Maintenance, and Renovation Work".** *NOTE:* **In the future if you decide to sand the floor surfaces throughout the property be aware that you will be disturbing lead and creating a significant lead hazard for the occupants. Please consult with a floor sanding professional who is knowledgeable about containing the dust by using a HEPA vacuum attachment.**
859652	**Composite soil**	**Bare soil areas surrounding the property (including near tomato plants in front of porch)**	**fair/poor**	**1020 PPM**	**400 – 5000 PPM interim controls**	**DO NOT EAT THE TOMATOES FROM THESE PLANTS. These plants have been planted in an area where there is a high concentration of lead in the soil. Remove and dispose of the plants. At a minimum plant grass seed/flowers/bushes or put wood chips/gravel in the bare soil areas surrounding the property. Put wood chips or gravel in areas where you are not planting or areas that have high foot traffic.**

***ACTION (CLEAN-UP) LEVELS**

Action levels are based on current state statute or federal guidelines. Regardless of the general recommended levels for cleanup, all lead paint in deteriorating condition or subject to disturbance found in a child's environment should be removed or covered to avoid the possibility of additive exposure and further poisoning.

Under current state statute (s. 254.11 Wisconsin Statutes) the definition of lead based paint (LBP) is any paint or other surface coating material containing more than 0.06 percent (%) lead by weight, calculated as lead metal.

Action Level Standards: Lead In Dust: Wisconsin Standards: floors = 40 µg/ft², window stools = 250 µg/ft², window troughs = 800 µg/ft²
% of Lead In Paint: Wisconsin Standard: 600 ppm or 0.06%
Lead In Soil: Wisconsin follows the Environmental Protection Agency recommendation: less than 400 PPM: no action, 400 PPM-5000 PPM: limited interim controls, greater than 5000 PPM: abatement measures or removal.(1µg/gram = 1PP)

WISCONSIN OCCUPATIONAL HEALTH LAB (WOHL) LEAD SAMPLE SUBMISSION FORM

Sampling Date:_____ Project:_____ Sampled By:_____ Phone:_____ Fax:_____

PROJECT ADDRESS:_____

FIELD CHAIN OF CUSTODY: 1. Relinquished by:_____ Date:_____ 2. Relinquished by:_____ Date:_____

WOHL PROJECT ID: (circle correct billing project): **1979 DPH Childhood Lead**

TURNAROUND TIME: (circle) Regular Priority Rush **SPECIAL INSTRUCTIONS:** _____

WOHL USE ONLY		FIELD #	SAMPLE LOCATION	SAMPLE TYPE circle/ specify	DIMENSIONS circle/specify	AREA circle/ specify	LEAD RESULTS	AREA RESULTS		LEAD BY WEIGHT
CODE #	LAB #			Paint Chip Soil Wipe	INCHES OR CENTIMETERS (length x width)	cm^2 or ft^2	Micrograms per sample	mg/cm^2	$\mu g/ft^2$	% or PPM

LAB CHAIN OF CUSTODY
Received By:_____
Date:_____

M:Kristi.risk.Lab Form

MAIL REPORT TO:
Name: _____
Street: _____
City: _____
State:_____ Zip:_____

MAIL OR BRING SAMPLES AND FORMS TO:
Wisconsin Occupational Health Lab Phone: (608) 224-6210
2601 Agriculture Drive (800) 446-0403
PO Box 7996 *(for US Postal Service Only)* FAX (608) 224-6213
Madison, WI 53707-7996